ALCOA HIGH SCHOOL
2022 - 2023
ACADEMIC PLANNING GUIDE

Graduating Competitive Students

Building Relationships

Rigorous Expectations

Relevant Instruction

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Minimum Graduation Requirements

ENGLISH (4 Credits)	✓ English 9 ✓ English 10 ✓ English 11 ✓ English 12
MATH (4 Credits)[1]	✓ Algebra 1 ✓ Geometry ✓ Algebra 2 ✓ Upper Level Math Course
SCIENCE (3 Credits)	✓ Biology 1 ✓ Chemistry 1 ✓ Physics, Anatomy and Physiology, or Physical World Concepts
SOCIAL STUDIES (3.5 Credits)	✓ World History or World Geography ✓ U.S. Government & Civics[2] ✓ American History ✓ Economics (0.5 credits)
GENERAL (4 Credits)	✓ Wellness ✓ Physical Education[3] ✓ Personal Finance (0.5 credits) ✓ Fine Art
WORLD LANGUAGE (2 Credits)[4]	✓ Spanish I/II or German I/II
ELECTIVE FOCUS (3 Credits)[5]	✓ May be in Career & Technical Education, Humanities, or Fine Arts
ELECTIVE CREDITS (6 Credits)	
Total Required For Graduation: 28 Credits	

[1] All students are required to complete a mathematics course sequence including Algebra I, Algebra II, Geometry and one additional higher level math course. Students who complete Algebra I in 8th grade will be required to take two additional higher level math courses. Students must be scheduled in a math course each year of high school.

[2] U.S. Government includes a United State civics exam that must be passed for graduation.

[3] Marching band or interscholastic athletics may satisfy this requirement.

[4] World Language may be waived for students not planning to attend a four-year college or university and will be replaced with three courses designed to enhance and expand their program of study. Parents must sign a waiver.

[5] Programs of Study include: Career and Technical Education (Health Science, HVAC, Marketing, Mechatronics, or STEM), Fine Arts (Music and/or Visual Art), and Humanities (Additional English, Social Studies, and/or World Language above the 4 required credits)

Graduation Recognition

Graduating seniors who have completed a regular, on-time diploma will be recognized with a symbol beside her/his name in the graduation program for the following honor(s) she/he is receiving:

Senior Scholars	(GPA and ACT formula listed below*): will wear Senior Scholars medallion at graduation
Summa Cum Laude	(3.76 or higher weighted GPA): will wear gold cords at graduation
Magna Cum Laude	(3.51 - 3.75 weighted GPA): will wear silver cords at graduation
Cum Laude	(3.20 -3.50 weighted GPA): will wear white cords at graduation
National Honor Society	(3.8 or higher weighted GPA **AND** 25 total hours of community service): will wear NHS stoles at graduation
District Distinction	Students will graduate with district distinction by attaining a 3.0 or higher weighted GPA **AND** earning an industry certification. Students will wear purple cords at graduation.
State Honors	Students who score at or above all the subject area readiness benchmarks on the ACT or equivalent SAT score will graduate with state honors. ACT Subject and Benchmark: English 18, Mathematics 22, Reading 22, and Science 23. Students will receive an honors sticker on their diploma.
State Distinction	students will graduate with state distinction by attaining a B average (3.0 weighted GPA) or better average **AND** completing at least one of the following: ● Earn a nationally recognized industry certification (CNA, SolidWorks, Hootsuite, OSHA, etc.) ● Participate in at least one (1) of the Governor's Schools ● Participate in one (1) of the state's All State musical organizations ● Be selected as a National Merit Finalist or Semifinalist ● Attain a score of thirty-one (31) or higher composite score on the ACT ● Attain a score of three (3) or higher on at least two advanced placement exams ● Successfully complete the International Baccalaureate Diploma Program ● Earn twelve (12) or more semester hours of transcripted postsecondary credit Students must report this completion to their school counselor in order to receive this honor and will receive a distinction sticker on their diploma.
TN Tri-Star Scholar	Students who score a 19 or higher on the ACT **AND** have earned a capstone industry certification will graduate as a Tri-Star Scholar. Students will receive a tri-star stamp on their diploma.

*The formula used to determine who is a Senior Scholar is based on a point system that consists of the student's weighted GPA and ACT/SAT score. Example: GPA 4.25 x 235.295 = 1000 points + ACT score of 36 x 27.778 = 1000 points for a total of 2000 points. If a student takes both the ACT and SAT, we will use the test score that gives the student the higher number of points. SAT provides an ACT equivalent score. Those students who have a point total of between 1750 and 2000 points would be designated as senior scholars. This process is an extremely valid indicator of students' academic success.

Early Postsecondary Opportunities (EPSO)

	AP Advanced Placement	DE Dual Enrollment	SDC Statewide Dual Credit	LDC Local Dual Credit	IC Industry Certification
Description	College-level high school courses offered in multiple subjects	Postsecondary (PS) course taught at the high school *Students are co-currently enrolled in the PS institution.	High school course aligned to statewide postsecondary standards	High School course aligned to standards at local postsecondary institution	Assessment based on standards for knowledge, skills, and competencies
Structure	Course and exam	Course	Course and Exam	Course and Exam	Exam
Provider	The College Board	Individual TN Post-Secondary Institutions	Tennessee Department of Education	Pellissippi State Community College	Industry
Student fees	$95.00 exam fee covered by the school *Registration and testing occurs at AHS.	Exam fees covered by the school *Registration and testing occurs at AHS.	No cost to students	Exam fees covered by the school	Exam fees covered by the school
High school Credit & Graduation Requirements	AP courses meet high school graduation and/or elective credit requirements	Dual Enrollment courses meet high school graduation and/or elective credit requirements	SDC course fulfills the same requirements as aligned high school course	LDC fulfills the same requirements as aligned high school course	IC's are achieved throughout various courses and therefore do not meet graduation requirements on their own
High School Recognition State Policies	Qualifies for GPA weighting- *One quality point added to the GPA.	Qualifies for GPA weighting- *One quality point added to the GPA.	Qualifies for GPA weighting- *One quality point added to the GPA.	Qualifies for GPA weighting- *One quality point added to the GPA	Qualifies for graduation with state distinction
Postsecondary Credit Determinant	Score on AP exam	Dual enrollment course completion with passing grade as assigned by postsecondary institution	Score on challenge exam at or above the established cut score	Score on challenge exam at or above the established cut score	Score on industry certification exam
Postsecondary Credit Awarded	Determined by postsecondary institutions Awarded upon matriculation	Credit awarded on PS transcript upon course completion Credit can be transferred to other PS institutions	Credit accepted at all TN postsecondary institutions	Credit accepted at Pellissippi State Community College	Determined by postsecondary institutions

AHS GPA Quality Point Transcript Calculation for Courses

Assigned quality points above 4.0 are not allowed for determining eligibility for the lottery scholarships. Quality points will be awarded based on successful completion of the course and sitting for the required exam.

Grade	Value	Regular	Honors	EPSO[1]
A	90-100	4	4.5	5
B	80-89	3	3.5	4
C	70-79	2	2.5	3
D	60-69	1	1.5	2
F	0-59	0	0	0

[1] EPSO courses include Advanced Placement (AP), dual enrollment (DE), local dual credit (LDC), statewide dual credit (SDC), and capstone industry certification (CNA, SolidWorks, and EMR) courses

College Credit Courses and Certifications

EPSO: The Advanced Placement (AP) Program

Advanced Placement is designed to provide students with an opportunity to receive college credit for introductory college courses and move directly to more interesting and challenging courses. All courses are taught according to the College Board Advanced Placement guidelines and students will use college level texts. To qualify for college credit, AP exams must be taken on a specific date and hour during the second or third week of May. Each test is designed and will be scored by the Educational Testing Service. Students who choose to take AP course work are expected to take the AP exam. Students who perform well can receive course credit and/or advanced standing at thousands of colleges and universities worldwide.

Specific course descriptions can be found by academic discipline in this catalog.

Math:
AP Statistics

English:
AP English 3 Language and Composition

Social Studies:
AP Human Geography
AP U.S. Government & Politics
AP U.S. History

EPSO: Dual Enrollment (DE) Program

Students who have met the benchmark ACT scores along with a 3.0 unweighted GPA, have the privilege of earning college credit while still enrolled in high school. Students may earn college credit through Maryville College, Pellissippi State, Roane State, or TCAT Knoxville. Students who meet the qualifications will be eligible for 2 $500.00 scholarships and 1 $200 scholarship during their final two years of high school. This scholarship, called the Dual Enrollment Grant, is provided through the Tennessee Education Lottery Scholarship (TELS) Program. Students wishing to pursue college credit courses must meet several criteria. Please see your student's counselor for more information.

Specific course descriptions can be found by academic discipline in this catalog:

Math:
DE College Algebra
DE Statistics
DE Calculus 1/2

Science:
DE Biology

Language:
DE Spanish I/II
DE German I/II

English:
DE Comp I
DE Comp II

Career & Technical Education:
DE Emergency Medical Responder
DE STEM Technology/Mechatronics I/II
DE Pre-Licensed Practical Nursing

Other courses are available upon request and if prerequisites are met.

EPSO: Local Dual Credit (LDC) Program

Alcoa High School has partnered with the Tennessee College of Applied Technology-Knoxville (TCAT), Pellissippi State Community College (PSCC) and Roane State Community College (RSCC) to provide AHS students the opportunity to earn local dual credit (LDC) for certain courses. If students pass an assessment provided and graded by the college, they receive local college dual credit for a college-level course.

Career & Technical Education:
Marketing I LDC (PSCC)
Marketing II LDC (PSCC)
Fundamentals of Construction LDC (TCAT)
Mechanical, Electrical, Plumbing LDC (TCAT)

Social Studies:
Philosophy LDC (PSCC)

Electives:
College Freshman Seminar through ACT Prep (PSCC)

EPSO: Statewide Dual Credit (SDC) Program

Statewide dual credit classes are college-level courses taught at Alcoa High School by trained high school teachers. Course learning objectives are developed by Tennessee high school and college faculty in order to ensure alignment with postsecondary standards. All students enrolled in a statewide dual credit course take the online challenge exam, which is used to assess mastery of the postsecondary-level learning objectives. Students who meet or exceed the exam "cut score" receive college credit that can be applied to any Tennessee public postsecondary institution. Exam scores are reported on the high school transcript to ensure postsecondary credit is accurately awarded but are not used in any state accountability measures. Alcoa High School uses the cubed root method when determining the exam "cut score" equivalency that will be placed in Skyward for their final exam grade.

Math:
PreCalculus SDC

Social Studies:
American History SDC
Psychology SDC
Sociology SDC

Language Arts:
Speech SDC

EPSO: Industry Certification (IC) Opportunities

Industry certifications are earned through secondary and postsecondary career and technical education (CTE) programs and courses. High school students are encouraged to focus their elective credits on robust, career-aligned learning pathways. Robust learning pathways should culminate with the achievement of recognized industry certifications, meaningful work-based learning experiences, and/or attainment of postsecondary credit hours through early postsecondary opportunities. As it pertains to industry certifications, all department-promoted certifications are aligned with postsecondary and employment opportunities and with the competencies and skills that students should have acquired through their chosen program of study.

Examples of industry certifications that students can earn through CTE course work are listed below:

Health Science:
OSHA-10
CNA
EMR

HVAC:
OSHA-10 General Industry
OSHA-30 General Industry
Snap-On PMI

Marketing:
Hootsuite Platform
Hootsuite Social Media

Mechatronics:
OSHA-10 General Industry
OSHA-30 General Industry
Snap-On PMI
Fanuc Robot Material Handling

HVAC H.E.A.T. Certifications
EPA 608
EPA 410 A

STEM Engineering:
OSHA-10 General Industry
Snap-On PMI
SolidWorks Associate

9th Grade Placement Criteria

English Language Arts	
Course	ACT English Projected State %ile
ACP English I	79 - 99
CP English I	40 - 78
English I	1 - 39

Math		
Course	ACT English Projected State %ile	Required 8th Grade Course
ACP Geometry	76 - 99	Honors Algebra I
ACP Algebra I	76 - 99	8th Grade Math
CP Algebra I	40 - 75	8th Grade Math
Algebra I	1 - 39	8th Grade Math

Science	
Course	ACT Science Projected State %ile
ACP Biology	80 - 99
CP Biology	39 - 79
Physical World Concepts	1 - 38

Social Studies	
Course	ACT Reading Projected State %ile
AP Human Geography	80 - 99
CP World History and Geography	39 - 79
World History and Geography	1 - 38

Recommended Course Sequences

English Course Sequence

Recommended Pathways			
9th Grade	10th Grade	11th Grade	12th Grade
English I ACP →	English II ACP →	AP Language and Composition or English III ACP →	Dual Enrollment Comp I/II
English I CP →	English II CP →	English III CP →	AP Language and Composition *or* English IV *or* Dual Enrollment Comp I

Math Course Sequence

Recommended Pathways				
8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
Algebra I →	Geometry ACP →	Algebra II ACP →	AP Statistics →	Precalculus SDC *or* Dual Enrollment Algebra/Statistics
	Algebra I CP →	Geometry CP →	Algebra II CP →	Applied Mathematical Concepts *or* Dual Enrollment College Algebra *or* SAILS
	Algebra I A/B →	Algebra II →	Geometry →	SAILS *or* Bridge
	Algebra I A →	Algebra I B →	Geometry A →	Geometry B

Science Course Sequence

Recommended Pathways			
9th Grade	10th Grade	11th Grade	12th Grade
Biology I ACP ⟶	Chemistry I ACP ⟶	Physics ACP or ⟶ Anatomy and Physiology ACP	*Elective Options* Anatomy and Physiology ACP *or* Dual Enrollment Science
Biology I CP ⟶	Physical World ⟶ Concepts CP	Chemistry I CP ⟶	*Elective Options* Anatomy and Physiology CP *or* Dual Enrollment Science
Physical World ⟶ Concepts (IEP)	Biology I A (IEP) ⟶	Biology I B (IEP)	

Social Studies Course Sequence

Recommended Pathways			
9th Grade	10th Grade	11th Grade	12th Grade
AP Human ⟶ Geography	AP Government ⟶	AP U.S. History ⟶	Economics ACP *Elective Options* Psychology SDC Philosophy LDC
World History CP ⟶	US Government ⟶ CP	American History ⟶ SDC	Economics CP *Elective Options* Psychology SDC Philosophy LDC
World Geography ⟶	US Government ⟶ CP	American History ⟶ SDC	Economics CP

Dual Enrollment

Dual Enrollment (DE)
Grade Level: 11-12 SEMESTER/ 1.000 credit(s) per class
Requirements: 3.0 unweighted GPA / ACT Subscores: English – 18, Reading – 19, Math – 19 (or higher)

Students meeting the requirements for GPA and ACT scores may take Dual Enrollment (DE) courses at Maryville College or Pellissippi State Community College. Dual Enrollment classes include, but are not limited to, English Composition 1010/1020, Intro to Psychology, College Algebra, Elementary Probability & Statistics, Calculus, etc. Students' responsibilities include applying for the Dual Enrollment Grant, applying to the college of choice, requesting a transcript and ACT scores be sent to the college of choice, providing their own transportation, and submitting final grades to their School Counselor. See your School Counselor if you have questions. DE courses qualify for additional grade weighting.

The following classes are general DE class choices that seniors can select during registration in order to indicate an interest in adding Dual Enrollment as a course request:

1. **DE English Composition I**
2. **DE Math**
3. **DE Science**
4. **DE Social Studies**
5. **DE World Language**

Note: Finalized DE schedules must be provided to the student's School Counselor in order for the student to be scheduled in the specific DE class at AHS and for the student to receive high school credit. See DE Application for more details on scheduling requirements.

English/Language Arts

AHS English Curriculum and Materials

English I CP (College Prep)
Grade Level: 9 SEMESTER/ 1.000 credit(s)
Prerequisite: Placement Data
Course Code: G01H09

This class will focus on TN English Language Arts Standards with special attention to state mandated assessment. Students enrolled in this course may focus on preparation for future studies in a four-year college or a role in the working world. Students will review parts of speech, grammar and usage, spelling, vocabulary, sentence structure, and paragraph development. Reading skills will be strengthened by selections taken from various genres including short stories, novels, and poetry. Literary elements in the various genres of literature will be studied and applied. Students will develop writing skills progressing to five paragraph compositions and a research paper. In addition, students will be responsible for displaying proper communication skills by way of oral presentations and group discussions. There is a moderate amount of work outside of class. One research project is required. This course will continue the sequence of language arts in the ninth grade. Students will focus on nonfiction, poetry, drama, novels, communication skills, logic, and media techniques. The students will be able to use classic plays and other forms of entertainment as a vehicle to analyze drama techniques and will also be able to display communication skills and employ various techniques to improve logical thinking through

presentations and activities. An End of Course Test will be given at the end of the course, which will count at least 15% of the final grade in the 2019-20 school year.

English I ACP (Advanced College Prep)
Grade Level: 9 SEMESTER/ 1.000 credit(s)
Prerequisite: Placement Data
Course Code: G01H09

This class will focus on TN English Language Arts Standards with special attention to state mandated assessment. Students enrolled in this course may focus on preparation for future studies in a four-year college or a role in the working world. Students will review parts of speech, grammar and usage, spelling, vocabulary, sentence structure, and paragraph development. Reading skills will be strengthened by selections taken from various genres including short stories, novels, and poetry. Literary elements in the various genres of literature will be studied and applied. Students will develop writing skills progressing to paragraph compositions and a research paper. In addition, students will be responsible for displaying proper communication skills by way of oral presentations and group discussions. There is a significant amount of work outside of class. One research project is required. This course will continue the sequence of language arts in the ninth grade. Students will focus on nonfiction, poetry, drama, novels, communication skills, logic, and media techniques. The students will be able to use classic plays and other forms of entertainment as a vehicle to analyze drama techniques and will also be able to display communication skills and employ various techniques to improve logical thinking through presentations and activities. They will also be able to analyze varying media strategies during this course as well. Finally, the students will be able to ensure they are meeting writing and grammar competencies through formal and informal writing opportunities. Assessment opportunities will include daily assignments, reading quizzes, tests, compositions, and presentations. Students who take this course will receive academic weighting. A summer reading assignment is required for this course. Note: Students must take a placement test in order to be considered for this course. An End of Course Test will be given at the end of the course, which will count at least 15% of the final grade in the 2019-20 school year. This course qualifies for additional grade weighting.

English II CP
Grade Level: 10 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in English I
Course Code: G01H10

This course is designed to provide a continuation of the study of grammar and application of language skills as well as the development of reading, writing, and speaking skills. Students will study short stories, plays, essays, poetry, biographies, and novels. Reference skills will be refined, and students will continue to develop patterns of writing that are used in both college and the working world: letters, reports, articles, and essays. Assessment will include vocabulary tests, class discussions, oral presentations, quizzes, objective tests, and compositions. A minimum of one major research project will be required. An End of Course Test will be given at the end of the course, which will count at least 15% of the final grade.

English II ACP
Grade Level: 10 Semester / 1.000 credit(s)
Prerequisite: One full credit in English I ACP and/or placement data
Course Code: G01H10

This course continues the accelerated sequence in language arts at Alcoa High School and is strongly recommended for students who wish to attend a competitive four-year college. The application of grammatical knowledge and language skills are required for both reading and writing assignments. Students will read a variety of short stories and essays. They are expected to analyze, compare, and evaluate examples of world literature, which comprise the main body of work studied in this course. Students will continue to develop and refine research skills, and at least one major project will be required. Assessment for this course will include but not be limited to essay examinations, class discussion, oral presentations, objective tests, weekly vocabulary tests, and research projects. Summer outside reading and preparation for this class are required. Students who choose this course will receive academic weighting. An End of Course Test will be given at the end of the course, which will count at least 15% of the final grade. This course qualifies for additional grade weighting.

English III CP
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in English II
Course Code: G01H11

As the third step in the College Prep English sequence, English III includes a survey of American literature and will focus on further developing analytical writing skills and reviewing TN English Language Art standards as students prepare for state-mandated assessments and college-level writing to come. Units of study will cover a cross-section of American literature from the early Native-American and Colonial periods through the romantic, realist, and early modern movements. Assigned readings will include both literary and informational texts (particularly those pertaining to United States history) with an emphasis on further enhancing students' critical reading skills. Assessment will include several formal essays, research papers, projects, tests, quizzes, as well as daily classwork and homework. An End of Course Test will be given at the end of the course, which will count at least 15% of the final grade.

English III ACP
Grade Level: 11 Semester / 1.000 credit(s)
Prerequisite: One full credit in English II ACP and/or placement data
Course Code: G01H11

This course continues the accelerated sequence in language arts at Alcoa High School and is strongly recommended for students who wish to attend a competitive four-year college. The application of grammatical knowledge and language skills are required for both reading and writing assignments. Students will read a variety of short stories and essays. Units of study will cover a cross-section of American literature from the early Native-American and Colonial periods through the romantic, realist, and early modern movements. Assigned readings will include both literary and informational texts (particularly those pertaining to United States history) with an emphasis on further enhancing students' critical reading skills. Examples of rhetorical arguments will be analyzed, compared, and evaluated. Students will continue to develop and refine research skills, and at least one major project will be required. Assessment for this course will include but not be limited to essay examinations, class discussion, oral presentations, objective tests, weekly vocabulary tests, and research projects. Summer outside reading and preparation for this class are required. Students who choose this course will receive academic weighting.

AP Language and Composition [AP English III]
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in English II and placement data

Course Code: G01H17

This course continues the accelerated sequence in language arts at Alcoa High School and is recommended for students who wish to attend a competitive four-year college. The application of grammatical knowledge and language skills are required for both reading and writing assignments. This course emphasizes the importance of non-fiction and informational texts and will survey philosophical trends through literature, focusing on rhetorical devices and their impact. In addition to analytical reading of literature and social studies, communication skills in writing and speaking will be stressed. Examples of rhetorical arguments will be analyzed, compared, and evaluated. Students will continue to develop and refine research skills, and at least one research paper is required. Students are required to sit for the College Board AP Language and Composition exam in May for an opportunity to receive college credit. Other assessments may include tests, essays, portfolios, and vocabulary. Summer outside reading and preparation for this class are required. This course qualifies for additional grade weighting if the student sits for the exam.

English IV CP
Grade Level: 12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in English III
Course Code: G01H13

As the fourth step in the College Prep English sequence, English IV includes a survey of British and world literature and a focus on writing in preparation for college-level writing. This course is designed to develop critical and analytical skills in speaking, writing, reading, listening, and thinking. Forming the core of the course curriculum will be a broad survey of British literature from the Anglo-Saxon Period to the present, along with a study of the basic philosophical ideas and historical events that contributed to those great works. In addition, students will be required to complete a minimum of four formal writing projects, including a research paper. Library and reference skills will be reinforced throughout these and a number of shorter writing assignments. Students enrolled in this course may focus on preparation for future studies in a four-year college or a role in the working world. Assessments will include daily assignments, projects, quizzes and tests, essays, book reviews, and a research paper.

Speech SDC
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Course Code: G01H71

Fundamentals of Speech and Communications Statewide Dual Credit (SDC) is an academically challenging course aligned with postsecondary (college/university) standards. Students are taught using a curriculum created by a State of TN faculty working group consisting of college and high school faculty from across the state. In addition to gaining confidence in public speaking situations, students in this class will learn about many communication scenarios, including interpersonal communication, intercultural communication, listening, negotiating, and resolving conflict. Specifically geared to help students overcome public speaking anxiety, this class combines lecture and activities to provide a rich and positive learning environment for everyone. Students take a challenge exam set by university professors which accounts for 15% of the student's final grade. This course qualifies for additional grade weighting.

Creative Writing
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Course Code: G01H16

The student will be given the opportunity to develop a creative outlet through additional writing experiences in fiction and/or nonfiction. Students often have the opportunity to experience expository writing in the classroom but have little time to develop imaginative writing. Creative Writing allows them to promote self-expression, to explore various writing styles, and to strive for variety in diction, sentence structure, and format.

ACT Prep
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Course Code: G25H00
Additional Curriculum and Materials Links:
Act.org
https://www.kaptest.com/booksonline
https://www.princetonreview.com
https://36university.com/

The focus of this class is to prepare students for standardized college entrance exams and to be a complementary part of a comprehensive educational program. The student will become more familiar with the format and concepts tested on the ACT and SAT tests, hone in on skills that will make the student more successful beyond high school, become more intellectually disciplined, learn time management needed for timed tests, become aware of the needed vocabulary skills, develop listening and speaking skills through group and class discussions and presentations, recognize different learning styles and types of intelligence, identify and employ study habits to cater to specific areas of need, refresh content-specific skills where needed, identify: course of study, necessary skills, test scores, and financial means needed to enter colleges/universities of interest, help the student become more fiscally responsible, take a critical look at possible career choices through research, identify areas of personal stress and employ stress management techniques. Students may opt-out of this required class their junior year if they score 29 or higher on the ACT prior to the first day of the scheduled semester.

Math

AHS Mathematics Curriculum and Materials

RTI/RTI2-B Math
Grade Level: 10-12 SEMESTER/1.000 credit(s) per semester
Course Code: G25H1600

This course is designed for students who need remediation in mathematics or are credit deficient in their courses. This class will MAY be taught online under the supervision of a mathematics instructor.

Algebra I A YEARLONG
Grade Level: 9 SEMESTER/ 1.000 credit(s) per semester
Course Code: G02H03

This course is designed for students who need individualized instruction in Algebra as documented in their IEP. Topics of this course include the language of Algebra, real numbers, solving and analyzing linear

equations, and graphing relations and functions. Successful completion of this course will prepare students for Algebra I B.

Algebra I B
Grade Level: 10 SEMESTER/ 1.000 credit(s) per semester
Prerequisite: One full credit in Algebra I A
Course Code: G02H04

This course is designed for students who need individualized instruction in Algebra as documented in their IEP. Students will cover topics such as radical expressions and triangles, non-linear functions, data analysis, and probability. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade.

Geometry A
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Algebra I B
Course Code: G02H14

This course is designed for students who need individualized instruction in Geometry as documented in their IEP. Students will cover topics such as the properties of angles, triangles, quadrilaterals, and other regular figures. Students will also go into depth regarding properties of graphing on the coordinate plane. This course includes topics suggested by the State Guide and the new State Standards.

Geometry B
Grade Level: 12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Geometry A
Course Code: G02H15

This course is designed for students who need individualized instruction in Geometry as documented in their IEP. Students will cover topics such as the properties of angles, triangles, quadrilaterals, and other regular figures. Students will also go into depth regarding properties of graphing on the coordinate plane. This course includes topics suggested by the State Guide and the new State Standards. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade.

Algebra I CP A/B (Yearlong)
Grade Level: 9 SEMESTER/ 1.000 credit(s) per semester
Course Code: G02H00

This course is designed for all students starting their Algebra I experience. The course will mainly utilize direct instruction, discovery learning, a flipped classroom concept, and integration of technology. Topics of interest in this course include the language of Algebra, real numbers, solving inequalities, solving and analyzing linear equations, and graphing relations and functions. Successful completion of this course will give the student necessary algebraic skills needed for the next level of mathematics course. Assessment will typically come from homework, quizzes, and test results. Successful completion of Algebra I A will award the student an **elective** credit. Successful completion of Algebra I B will result in a completed math credit. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade.

Algebra I ACP
Grade Level: 9 SEMESTER/1.000 credit(s)
Course Code: G02H00
Prerequisite: Placement based on math projection data.

This is an accelerated honors level Algebra I class designed to move at a faster pace and dive deeper into concepts. The course will involve both direct instruction as well as discovery learning. Topics of interest in this course include the language of Algebra, real numbers, solving inequalities, solving and analyzing linear, quadratic, and root equations, and graphing relations and functions. Successful completion of this course will give the student necessary algebraic skills needed for the next level of mathematics courses. Assessment will typically come from homework, quizzes, and test results. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade. This course qualifies for additional grade weighting.

Geometry CP
Grade Level: 10-11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Algebra I and math projection data.
Course Code: G02H11

This is a college preparatory course that will include all the topics suggested by the State Standards. Assignments and discussion will center on the problems and ideas of the basic terms and concepts of triangles, analyzing incomplete deductive proofs, rigid motion, circles, and areas/volumes. This course is heavily based online and will require frequent use of technology outside the classroom. This course includes homework, quizzes, tests and projects/frequent group work. Time required outside of class is necessary, but not overwhelming. This is a semester long course. The workload for the class is moderate. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade.

Geometry ACP
Grade Level: 9-11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Algebra I and math projection data.
Course Code: G02H11

This is an accelerated college preparatory course that will include all the topics suggested by the State Standards. Assignments and discussion will center on the problems and ideas of the basic terms and concepts of triangles, analyzing incomplete deductive proofs, rigid motion, circles, and areas/volumes. This course is heavily based online and will require frequent use of technology outside the classroom. This course includes homework, quizzes, tests and projects/frequent group work. Time required outside of class is necessary, but not overwhelming. This is a semester long course. The workload for this class is maximum. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade. This course qualifies for additional grade weighting.

Algebra II CP
Grade Level: 10-11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Algebra I and math projection data.
Course Code: G02H05

This course covers the entire spectrum of state standards provided by the state of Tennessee. Entrance into this course requires completion of Algebra I and teacher recommendation. This course is heavily

based online and will require frequent use of technology outside the classroom. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade.

Algebra II ACP
Grade Level: 9-10 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Algebra I and math projection data.
Course Code: G02H05

This course is an advanced Algebra II course and will proceed at a faster pace and go deeper into concepts than Algebra II CP. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade. This course qualifies for additional grade weighting.

Statistics SAILS
Grade Level: 12 SEMESTER/ 1.000 credit(s)
Course Code: G02H37

The Seamless Alignment and Integrated Learning Support (SAILS) program targets students who have not achieved college readiness benchmarks by introducing the college developmental curriculum into the high school senior year. Developed by K-12 teachers and higher-education faculty, SAILS embeds college Learning Support competencies into the high school senior year math course, allowing students to begin their college career prepared for credit-bearing coursework. SAILS utilizes a facilitated hybrid instructional model, combining the professional pedagogical expertise of the certified teacher with dynamic properties of multimedia and digital content. For more information about SAILS, visit www.tbr.edu/sails.

AP Statistics
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One credit each in Algebra I, Algebra II, and Geometry; and math projection data.
Course Code: G02H26

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course will be a one-semester course. This course is for junior level honors students, or senior level students. Students who successfully complete the course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. This course qualifies for additional grade weighting for students who sit for the exam.

Bridge Math
Grade Level: 12 SEMESTER/ 1.000 credit(s)
Course Code: G02H41

Seniors are recommended for this course based on their ACT math score. Students who score below 19 on the math portion of the ACT must register for this course as their senior math course. A review of previously learned math skills will be taught in order to prepare students for college level mathematics courses. Applications of these skills should play a principal role in the learning and assessment process. Technology will be used to strategically enhance the student's understanding of core concepts via the use of multiple problem-solving strategies.

Applied Mathematical Concepts
Grade Level: 12 SEMESTER/ 1.000 credit(s)
Course Code: G02H42

This course replaces the Finite Math course previously taken in senior year. Concepts covered in this class include financial mathematics, linear programming, Algebra, problem solving, logic, data, reasoning, probability distribution, and confidence intervals. This is a college prep level course that is a senior-level math approved by the NCAA Clearinghouse.

Pre-Calculus SDC
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One credit each in Algebra I, Algebra II, and Geometry; and math projection data.
Course Code: G02H74

This course is a statewide dual credit (SDC) college level course, and it involves a detailed study of advanced mathematical topics, including but not limited to equations, inequalities, functions, in-depth Trigonometry, models, and Analytical Geometry. Students will take the SDC challenge exam for college credit, which may count up to 15% of the student's final grade. This course qualifies for additional grade weighting.

Science

AHS Science Curriculum and Materials

Physical World Concepts CP
Grade Level: 9 SEMESTER/ 1.000 credit(s)
Course Code: G03H26

Students will investigate through experimentation and laboratory activities the 5 major divisions of the physical world: (1) Mechanics; (2) Thermodynamics; (3) Waves and Optics; (4) Electricity and Magnetism; (5) Nuclear Science. Throughout the course of Physical World Concepts students will refine their problem solving skills, apply the engineering and legacy cycles, design experiments, conduct experiments, complete formal lab reports, practice using excel to create graphs and interpret data, as well as build and test prototypes.

Biology I A
Grade Level: 10 SEMESTER/ 1.000 credit(s)
Course Code: G03H06

Biology I A & B are courses that introduce students to the world of living things. Enrollment is limited to students with qualifying disabilities as documented in the IEP. The students explore the following topics in Biology I A: ecological organization, population dynamics, flow of energy, and the diversity and evolution of species. Biology I A & B are taken together. Biology I A is taken in the spring semester. Biology I B is taken the following fall semester.

Biology I B
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Course Code: G03H07

Biology I A & B are courses that introduce students to the world of living things. Enrollment is limited to students with qualifying disabilities as documented in the IEP. Biology I B is the second part of the course which focuses on the following: chemistry of the four major biomolecules, cells, cellular transport, cell reproduction, cell division, and genetics. Biology I A is taken in the spring semester. Biology I B is taken the following fall semester. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade in the 2019-20 school year.

Biology I CP
Grade Level: 9 SEMESTER/ 1.000 credit(s)
Course Code:G03H03

Biology I is a laboratory science course that investigates the relationship between structure and function from molecules to organisms and systems, the interdependence and interactions of biotic and abiotic components of the environment, and mechanisms that maintain continuity and lead to changes in populations over time. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the following content: Ecology, Cells, Energy, Mitosis, Meiosis, and Genetics. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade in the 2019-20 school year.

Biology I ACP
Grade Level: 9 SEMESTER/ 1.000 credit(s)
Prerequisite: ACT Projection data
Course Code: G03H03

ACP Biology I is an advanced laboratory science course that investigates the relationship between structure and function from molecules to organisms and systems, the interdependence and interactions of biotic and abiotic components of the environment, and mechanisms that maintain continuity and lead to changes in populations over time. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the following content: Ecology, Cells, Energy, Mitosis, Meiosis, and Genetics. An End of Course Test will be given at the end of the course, which will count at least 15% of their final grade in the 2019-20 school year.

Chemistry I CP
Grade Level: 11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Biology I
Course Code: G03H12

Chemistry will cover the following topics: Measurement, Periodic Trends, Matter and Change, Atomic Theory, Electron Arrangement, Ionic Bonding and Nomenclature, Chemical Reactions and Product Prediction, Mole Concept, Stoichiometry, Gas Laws and Solutions. Each student will be participating in several lab activities. Moderate homework and some memorization will be required.

Chemistry I ACP
Grade Level: 10-11 SEMESTER/ 1.000 credit(s)
Prerequisite: A grade of "B" or better in Algebra I ACP or projection data
Course Code: G03H12

Chemistry ACP will cover the following topics: Measurement, Periodic Trends, Matter and Change, Atomic Theory, Electron Arrangement, Ionic Bonding and Nomenclature, Mole Concept, Chemical Reactions and Product Prediction, Mole Concept with Stoichiometry, Gas Laws, Solutions, Organic Nomenclature and Nuclear Chemistry. Each student will be participating in several lab activities. This honors course will require much more memorization and higher-level problem solving than Chemistry I CP. This course qualifies for additional grade weighting. This is an analytical course, valuable in preparation for more rigorous college work.

Physics ACP
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: A grade of "B" or better in Chemistry I ACP and Algebra II ACP or a grade of "A" in Chemistry I CP and Algebra II CP.
Course Code: G03H20
Physics is an analytical science that requires strong problem solving skills. Physics is becoming more and more relevant in thousands of vocations. As the technology of our world grows exponentially, an understanding of basic Physics concepts can prepare students for the demands of these technologies as well as any course out there. Physics ACP will be a study of kinematics (motion) with a strong dose of the following topics: Measurement, Graphing and Charts, Velocity, Acceleration, Displacement, Time, Force, Two Dimensional Motion, Gravitation, Momentum, Energy, Thermodynamics, Waves and Electricity. This course will demand two six-week out of class projects. This course qualifies for additional grade weighting.

Human Anatomy & Physiology or Human Anatomy and Physiology Dual Enrollment
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Biology I
EPSO-Students accepted into the pre-LPN dual enrollment program with TCAT-Knoxville will receive credit hours toward the practical nursing licensure program upon successful completion of this course.
Course Code: G03H31

Anatomy and Physiology is designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems.

Social Studies

Social Studies Curriculum and Materials

World History and Geography CP
Grade Level: 9 SEMESTER/1.000 credit(s)
Course Code: G04H10

Students study how ideas and stories shape and define human history and our modern world. Students explore the creative ways these ideas and stories gave rise to the nation-state in Europe, the origins and consequences of the Industrial Revolution, political reform in Western Europe, imperialism across the globe, and the economic and political roots of the modern world. Students explain the causes and

consequences of the people, ideas, and events of the past century as well as study the rise of nationalism and the continuing persistence of political, ethnic, and religious conflict in many parts of the world. Students explore geographic influences on history, with attention to political boundaries that developed with the evolution of nations from 1750 to the present and the subsequent human geographic issues that dominate the global community. Students ultimately seek ways to combine their individual stories with the stories from the past and analyze how those stories translate into the future of humankind.

AP Human Geography
Grade Level: 9-10 SEMESTER/1.000 credit(s)
Prerequisite: ACT Projection Data
Course Code: G04H30

This Advanced Placement course is a College Board accredited course which introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They examine methods and tools geographers use in research and application. Assessments include tests, quizzes, essays, textual analysis, and class participation. Students take the College Board Advanced Placement Human Geography exam in May. There is an advanced level of reading and writing required for this course. This course qualifies for additional grade weighting for students who sit for the exam.

U.S. Government & Civics CP
Grade Level: 10 SEMESTER/1.000 credit(s)
Course Code: G04H12

U.S. Government focuses on the concepts that established the purposes, principles, and practices of American government as established by the United States Constitution. Students examine the structure and processes of the government of the state of Tennessee and local governments. Students analyze their rights and responsibilities as citizens as well as how to exercise these rights and responsibilities at the local, state, and national levels. Students complete research-based assignments, tests, quizzes, essays, textual analysis assignments, and daily discussions. Students must pass a state-mandated U.S. citizenship exam.

AP U.S. Government & Politics
Grade Level: 10 SEMESTER/1.000 credit(s)
Prerequisite: ACT Projection Data
Course Code: G04H26

This Advanced Placement course is a College Board accredited course which introduces political concepts, ideas, institutions, policies, interactions, roles, and behaviors which characterize America's constitutional system and political culture. Students study U.S. foundational documents, Supreme Court decisions, and other texts to understand the interactions among political institutions, processes, and behaviors. Assessments include tests, quizzes, essays, textual analysis, class participation, and a winter break assignment. Students take the College Board Advanced Placement U.S. Government & Politics exam in May, and must pass a state-mandated U.S. citizenship exam. There is an advanced level of reading and writing required for this course. This course qualifies for additional grade weighting for students who sit for the exam.

American History SDC

Grade Level: 11 SEMESTER/1.000 credit(s)
Course Code: G04HB3

Statewide Dual Credit (SDC) American History is an academically challenging course aligned with postsecondary (college/university) standards. Students are taught using a curriculum created by a State of TN faculty working group consisting of college and high school faculty from across the state. The curriculum begins at the end of the 1800s and continues through to present day events. Students take a challenge exam written by university professors which accounts for 15% of the student's final grade. This course qualifies for additional grade weighting.

AP U.S. History
Grade Level: 11 SEMESTER/1.000 credit(s)
Prerequisite:ACT Projection Data
Course Code: G04H21

This Advanced Placement course is a College Board accredited course which focuses on developing students' understanding of American history from approximately 1491 to the present. The course has students investigate the content of US history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America and the world; geography and the environment; and culture and society) that students explore throughout the course in order to make connections among historical developments in different times and places. Students take the College Board AP US History examination in May. This course qualifies for additional grade weighting for students who sit for the exam.

Economics CP
Grade Level: 12 NINE WEEKS/0.500 credit(s)
Course Code: G04H13

Economics includes an examination of the allocation of scarce resources and the economic reasoning used by government agencies and by people as consumers, producers, savers, investors, workers, and voters. Key elements of the course include the study of scarcity, supply and demand, market structures, the role of government, national income determination, money and the role of financial institutions, economic stabilization, and trade. Students examine the key economic philosophies and economists who have influenced the economies around the world in the past and present. Informational text and primary sources play an instrumental part of the study of economics. Two projects are completed during this course. Assessments include tests, quizzes, essays, research, required projects, class participation, etc.

Economics ACP
Grade Level: 12 NINE WEEKS/0.500 credit(s)
Prerequisite: Recommendation of previous social studies teacher
Course Code: G04H13

The fields of both microeconomics and macroeconomics are included in this study of the economic decision making process. An examination of the allocation of scarce resources in the product market and factor market highlight the interaction of the consumer, producer and government. Greater dependence on mathematical principles further student understanding of economic ideas such as supply and demand, market structures, the role of government, national income determination, money and the role

of financial institutions, economic stabilization, and trade. Students examine the key economic philosophies and economists who have influenced the economies around the world in the past and present. Greater emphasis is placed on informational texts and primary sources. Three projects are completed during this course. Assessments include tests, quizzes, essays, research, required projects, class participation, etc. This course qualifies for additional grade weighting.

Personal Finance
Grade Level: 12 NINE WEEKS /0.500 credit(s)
Course Code: G04H36

Personal Finance is designed to help students understand the impact of individual choices on occupational goals and future earning potential. Real world topics covered include income, money management, spending and credit, as well as savings and investing. Students design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes. This course provides a foundational understanding for making informed personal financial decisions.

Introduction to Philosophy
Grade Level: 11-12 SEMESTER/1.000 credit(s)

This class is an investigation of the fundamental questions pertaining to reality, truth, freedom, the nature of humankind, the existence of God and social/political theory. The class seeks to expand the student's awareness and basic understanding of philosophy and its various branches, and develop the student's ability to think critically - through the building and understanding of both deductive and inductive arguments - about traditional philosophical questions and problems.

Introduction to Psychology SDC
Grade Level: 11-12 SEMESTER/1.000 credit(s)
Course Code: G04HB5

Statewide Dual Credit (SDC) Psychology introduces students to psychology, history and approaches, research, brain physiology and function, human development, sensation and perception, memory, consciousness, cognition and intelligence, sexuality, psychological disorders, therapy/treatment, social psychology, motivation and emotion, health psychology, learning, and personality. Assessments include tests, quizzes, essays, research, required projects, class participation, etc. Students take a challenge exam written by university professors which accounts for 15% of the student's final grade. This course qualifies for additional grade weighting.

Film Studies
Grade Level: 10-12 SEMESTER/1.000 credit(s)
FIlm Studies is an elective course that explores the relationship between American culture and commercial films from the 20th and 21st Centuries. Students will learn the technical components of movies while examining the time period in which these films were produced. Students will be able to identify political, economic, social, and cultural issues that have concerned Americans throughout the 20th and 21st Centuries and analyze how movies continue to both reflect and shape American society.

World Languages

World Languages Curriculum and Materials

Spanish I
Grade Level: 9-11 SEMESTER/ 1.000 credit(s)
Prerequisite: Only freshmen who are enrolled in English I ACP will be allowed to register for a foreign language in 9th grade.
Course Code: G24H04

Spanish I is a basic introduction to the Spanish language and its culture. Students will be taught a variety of useful vocabulary with an emphasis on pronunciation and use. Basic grammar structures will also be introduced and practiced with supportive listening, speaking, reading, and writing activities. Cultural components will be compared and contrasted as well. Assessment will include both oral and written evaluation, including tests, quizzes, listening and reading comprehension, as well as classroom activities and projects. Some independent activities will require use of the Internet.

Spanish II
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Spanish I
Course Code: G24H05

Spanish II continues the development of skills in understanding, speaking, reading, and writing Spanish. More complex vocabulary patterns and grammatical concepts will be introduced, and there will be more focus on reading supportive text and writing short compositions. Assessment will be both oral and written, including tests, quizzes, listening and reading comprehension, as well as classroom activities and projects. Some independent activities will require use of the Internet.

Spanish III ACP
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Spanish II
Course Code: G24H06

Spanish III will allow students who have enjoyed the beginning courses in Spanish to continue their studies. After a review of material covered in the previous courses, students will be presented with more complex grammar structures. This course is designed to help students who will be taking placement exams at the university level. Activities will encourage oral communication and grammatical complexity. Note: Course offering depends on availability.

German I
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Prerequisite: Only freshmen who are enrolled in English I ACP will be allowed to register for a foreign language in 9th grade.
Course Code: G24H29

German I is the basic beginning German course. This course is designed to introduce students to the skills necessary to speak, understand, read, and write through the use of videos and conversation. In many of the reading selections, and activities, cultural aspects are emphasized. Assessment will include both oral and written evaluations.

The German American Partnership Program (GAPP) is one of the longest established student exchanges in existence today, sponsored by both the US Department of State and the German Foreign Ministry. Alcoa High School has agreed to partner with the Regine-Hildebrandt-Gesamtschule in Birkenwerder (near Berlin), Germany. The bilateral exchange consists of a two-week visit by RHG students to Alcoa (October/November 2021) and a two-week return visit to Germany by AHS students in May 2022. Students who are interested in hosting a German student/traveling to Germany are encouraged (but not required) to enroll in German classes offered at AHS.

German II
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in German I
Course Code: G24H30

The emphasis in German II is on further development of skills in speaking, understanding, reading and writing German. More complex vocabulary and grammatical concepts are introduced, and culture and civilization are stressed. Assessments will include both oral and written evaluations. Students will participate in the National German Examination. Students receiving a grade of "A" for a total of two semesters are eligible for membership in the National German Language Honor Society (Delta Epsilon Phi).

German III ACP: Early Bird
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in German II
Course Code: G24H31

This class will be offered before school. German III will allow students who have enjoyed the beginning courses in German to continue their studies. After a review of material covered in the previous courses, students will be presented with more complex grammar structures. This course is designed to help students who will be taking placement exams at the university level. Activities will encourage oral communication and grammatical complexity. Students will participate in the National German Examination. Students receiving a grade of "A" for a total of two out of three semesters in German are eligible for membership in the National German Language Honor Society (Delta Epsilon Phi). Note: Course offering depends on availability.

Fine Arts

Fine Arts Curriculum and Materials

Visual Art I
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Course Code: G05H08

The focus of Art I is to develop the student as an artist, while incorporating the study of art creation, aesthetic appreciation, and art history. Major studio emphasis will be placed on learning to draw and a survey of art history from prehistoric art until medieval times. Assessment includes performance evaluation, notebook, and written tests.

Drawing and Painting
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Visual Art I
Course Code: G05H09

Drawing and Painting is for the student who wants to continue studying studio art and art history. Emphasis will be placed on different types of art media, art theory, and continuing to study art history beginning with the Early Renaissance to Modern Art. Spiral sketchbooks and portfolios are required and assessed. Three-ring notebooks from Art I are required for class use.

Art Culture Around the World
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit of Visual Art I
Course Code: G05H09S

Get ready to discover art from around the world! In this class you will learn about traditional folk art techniques from Africa, South America, Asia, Australia, North American, and more. Students will make wonderful multicultural artwork as they learn more about the world around them. Mask making, weaving, basketry, and sculpture building will all be included in this study of the world's diverse cultures and their art. This class is designed for students who love to learn about art and create but are afraid that studying advanced art is beyond their skill level.

Photography
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Visual Art I
Course Code: G05HC2

Alternative approaches to photography will be explored by making homemade cameras and photographs without the use of a traditional camera. Traditional black and white photography will be explored. Students will spend time learning about the history of photography, camera operations, and darkroom procedures. Manual, single lens reflex, 35mm cameras will be used for taking photographs. Students not owning cameras will have one camera available to share, but having one is strongly encouraged. Three-ring binders will be required to store negatives and notes on darkroom procedures. Time spent outside of school will be required of photography students. After school, photo lab hours will be available for students needing more time to finish assignments.

Singers Fall/Singers Spring YEARLONG
Grade Level: 10-12 SEMESTER/ 1.000 credit(s) per semester
Freshmen will be allowed in Singers on an as needed basis.
Prerequisite: Audition
Course Code: G05X12

Students will appreciate performing at different occasions outside of school and during regular school hours. This is an audition-only ensemble. In this ensemble, students will learn the foundations of proper singing, as well as elements of music theory, sight-reading, and history. An introduction to all types of music is emphasized. These students are required to participate in fundraising to cover expenses for music, travel, and uniforms. If students do not participate in fundraisers, parents are required to make donations to the choral department. Students are expected to attend all performances and rehearsals. They should expect many performances throughout the year and are required to attend all (concerts,

festivals, competitions, etc.). Students will be evaluated through performances, attendance, conduct, sight-reading examinations, and class participation. This class may be repeated for credit.

Note: Students who take this class are required to do so both semesters due to the difficult performance schedule.

Music Appreciation
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Course Code: G05H44

Music Appreciation is a non-performance course that explores the elements and history of music. It encourages students to view music as an ingredient of the student's own life, and of human life in all cultures. It uses history as a resource for understanding how music has fulfilled basic human purposes in other ages and present times. Content is divided between music history and a study of musical elements through musical literature.

Marching Band Fall
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Course Code: G05X14

The marching band performs at all football games, selected festivals and other activities that may be scheduled. Students enrolled in this course are required to attend pre-school band camp in July, all after school rehearsals, and all performances. Students involved will perform music suited to their ability levels. Participation in all performances and rehearsals is considered an integral part of the course and is required.

Concert Band Spring
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Course Code: G05H88

This course is open to students who have prior experience performing on a woodwind (flute, oboe, clarinet, saxophone, bassoon), brass (trumpet, horn, trombone, tuba), or percussion instrument, or by special arrangement with the instructor. This instrumental ensemble experience is designed to develop the basics of musicianship: Instrumental performance technique, intonation and tonal skills, rhythmic skills, and expressive/interpretive skills.

Career and Technical Education (CTE)

CTE Curriculum and Materials

Architecture and Construction/HVAC Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Fundamentals of Construction LDC	Mechanical/Electrical Systems LDC	DE HVAC I and II	DE HVAC III and Work-Based Learning IV

Notes:
Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.
Through the sequence of 2 Local Dual Credit Courses at the 9th and 10th Grade and 4 DE Courses at the 11th and 12th grade, students can complete 864 hours toward their Licensed HVAC Technician Program of Study. There is a possibility to complete summer bridge courses between the 11th and 12th grades and at the end of the 12 grade in order for students to receive the Licensed HVAC Technician Diploma from the Tennessee College of Applied Technology.

Principles of Construction LDC

Grade Level 9-12 Semester/1.00 credit(s)
Potential Industry Certifications: OSHA 10, Precision Measurement Instrumentation, Advanced Multimeter, NC3 Trane Airflow Certification

Fundamentals of Construction is the entry level course in the Tennessee College of Applied Technology-HVAC Technician program of study. In this class, students will cover worker characteristics, technology foundations, OSHA safety, shop safety, tools, equipment, and shop practices, and green awareness as they related to the construction and HVAC professions. Students will complete construction building projects to apply their knowledge and skills and have the opportunity to bank credit hours toward a licensed HVAC technician certification. There are multiple industry certification opportunities in this class.

In addition, students who successfully complete OSHA and Precision Measurement Instrumentation certifications and maintain an 85 overall course average are eligible for automatic dual credit with Pellissippi State Community College.

Mechanical/Electrical Systems LDC

Grade Level: 9-12 Semester: 1.00 credit(s)

Prerequisite: Fundamentals of Construction
Potential Industry Certifications: EPA 608 and NC3 Trane Refrigeration Diagnostics

Mechanical, Electrical, & Plumbing Systems prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Through this class students will begin to learn the fundamentals of refrigeration as it relates to heating and cooling systems. Students will also cover worker characteristics, have an introduction to HVAC service systems through the Certified Trane NC3 training program, and obtain the industry-valued EPA 608 certification that is required for HVAC professionals. This course allots students additional clock hours toward their Licensed HVAC Certified Technician program at Tennessee College of Applied Technology Knoxville.

DE HVAC I
Prerequisites: Fundamentals of Construction LDC and MEP LDC
Potential Industry Certifications: HVAC H.E.A.T. certification and R-401 A certification

This is the third Tennessee College of Applied Technology-Knoxville course that will lead students toward a certification as a licensed Heating/Ventilation/Air-Conditioning/Refrigeration certification (HVAC-R). In this dual enrollment course, students will further their training toward the HVAC technician certification program. In this course students will continue to advance their knowledge of the fundamentals of refrigeration as it relates to HVAC systems, will learn and practice HVAC installation techniques, and will earn the industry value R-401 A certification. In this course, students will gain additional clock hours toward the Tennessee College of Applied Technology-HVAC diploma.

DE HVAC II
Grade :11 or 12
Prerequisites-Fundamentals of Construction LDC, MEP LDC, DE HVAC I
Potential Industry Certifications: HVAC H.E.A.T. certification and R-401A certification

This course is the second dual enrollment Tennessee College of Applied Technology-Knoxville course. This college-level course aligns with the Basic Automatic Controls HVAC course at the college level and leads to the HVAC-R Technician certification.

Computer Coding Course Sequence

Recommended Pathway
Curriculum and Materials Links:
Kerr - Engineering/CS Curriculum Materials 2022-2023

9th Grade	10th Grade	11th Grade	12th Grade
Computer Science Foundations	Coding I	Coding II or Mobile App Development or Work-Based Learning	Coding Practicum

Notes:
Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.

Computer Science Foundations: LDC

Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Potential Industry Certifications: CompTIA A+, CompTIA IT Fundamentals

Computer Science Foundations (CSF) is the entry-level course in our new Coding program of study and is intended to provide students with exposure to various information technology occupations, including those in computer coding. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Students who take this course will have the opportunity to earn dual credit hours with Pellissippi State Community College, at no cost to the student.

Coding I: LDC

Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Potential Industry Certifications: CompTIA A+, CompTIA IT Fundamentals

Coding I is a course intended to teach students the basics of computer programming. The course places emphasis on practicing standard programming techniques and learning the logic tools and methods typically used by programmers to create simple computer applications. Upon completion of this course, proficient students will be able to solve problems by planning multi step procedures; write, analyze, review, and revise programs, converting detailed information from workflow charts and diagrams into coded instructions in a computer language; and will be able to troubleshoot/debug programs and software applications to correct malfunctions and ensure their proper execution. Students who take this course will have the opportunity to earn dual credit hours with Pellissippi State Community College, at no cost to the student.

Web Design Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Computer Science Foundations	Web Design Foundations	Website Development	Web Design Practicum

Notes:
Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.

Computer Science Foundations: LDC

Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
Potential Industry Certifications: CompTIA IT Fundamentals

Computer Science Foundations (CSF) is the entry-level course in our new Coding program of study and is intended to provide students with exposure to various information technology occupations, including those in computer coding. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Students who take this course will have the opportunity to earn dual credit hours with Pellissippi State Community College, at no cost to the student.

Web Design Foundations

Grade Level: 10-12 SEMESTER/ 1.000 credit(s)

Web Design Foundations is a course that prepares students with work-related web design skills for advancement into postsecondary education and industry. The course is intended to develop fundamental skills in both theory and practical application of the basic web design and development process, project management and teamwork, troubleshooting and problem solving, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the web design and development industry; where interaction with a “client” is indicated in the standards, it is expected that students’ peers or the instructor may serve as mock clients in lieu of an actual relationship with an industry partner. Upon completion of this course, proficient students will be prepared for more advanced coursework in the Web Design program of study.

Marketing Course Sequence

Recommended Pathway

9th Grade	10th Grade	11th Grade	12th Grade
Marketing and Management I:	Marketing and Management II	Retail Operations or Work-Based Learning	Work-Based Learning

Principles LDC	or Social Media and Analytics	or Event Planning and Management	
Notes: Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.			

Marketing and Management I: Principles LDC

Grade Level: 9-10 SEMESTER/ 1.000 credit(s)

Potential Industry Certifications: HootSuite Platform

Intro to Marketing and Management I focuses on the study of marketing concepts and their practical applications. Students will examine the risks and challenges that marketers face to establish a competitive edge in the sale of products and services. Topics include foundational marketing functions such as promotion, distribution, and selling, as well as coverage of economic fundamentals, international marketing, and career development. Students will also have an introduction to the Marsh School store and develop skills that can be used to put on a resume. Upon completion of this course, proficient students will understand the economic principles, the marketing mix, and product development and selling strategies. Students are eligible to receive local dual credit with Pellissippi State Community College.

Marketing and Management II

Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Marketing and Management I (5931)
Industry Certification: Hootsuite Social Media

Marketing and Management II is a study of marketing concepts and principles used in management. Students will examine the challenges, responsibilities, and risks managers face in today's workplace. Subject matter includes finance, business ownership, risk management, marketing information systems, purchasing, promotion, and human resource skills. Students will also be responsible for working in the Marsh School Store throughout this course. This will allow them hands on experience in a workplace. Students will also have the opportunity to job shadow with local business partners throughout this course.

Retail Operations

Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Marketing and Management II
Coordinating Work-Based Learning is also available with this course

Retail Operations is designed to challenge students with the real world of supply chain management and merchandising services. The standards in this course are designed to prepare students with skills and knowledge related to buying, selling, human resource management, business operations, product management, promotion, and customer service. Decision-making skills, financial management, customer relations, ethics and legal issues are also addressed. Upon completion of this applied knowledge course, proficient students will have skills essential for entering careers as retail associates at entry and mid-level management as well as be prepared to enter postsecondary programs in business and marketing. The

content lends itself to both work-based learning and school-based enterprises opportunities within the Marsh School Store.

Social Media and Analytics

Grade Level: 10-12 SEMESTER/ 1.000 credit(s)

Prerequisite: One full credit in Marketing and Management I (5931)

Industry Certification: Hootsuite Platform

Social Media Marketing & Analytics is a study of concepts and principles used in social media marketing. Students will examine the uses, marketing strategies and data generated by social media marketing. Subject matter includes foundational social media knowledge, social media marketing strategies, communication, and ethical responsibilities. Students taking this course will learn and participate in broadcasting our sports programs including social media.

STEM Engineering Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Principles of Engineering and Technology	STEM Engineering Design I	STEM Engineering Design II	STEM Engineering Practicum
Notes: Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.			

STEM Principles of Engineering and Technology

Grade Level: 9-10 SEMESTER/ 1.000 credit(s)

Potential Industry Certifications: OSHA-10, NC3 Precision Measurement

STEM Principles of Engineering is a foundational course in the STEM cluster for students interested in learning more about careers in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in the engineering design process. They can evaluate an existing engineering design, use fundamental sketching and engineering drawing techniques, complete simple design projects using the engineering design process, and effectively communicate design solutions to others. Students who receive both the OSHA and NC3 Precision Measurement certifications and maintain an overall course average of 85 automatically receive local dual credit with Pellissippi State Community College.

STEM Engineering Design I

Grade Level: 10-12 SEMESTER/ 1.000 credit(s)

Prerequisite: One full credit in STEM Principles of Engineering and Technology

STEM Engineering I is a fundamental course in the STEM cluster for students interested in developing their skills in preparation for careers in engineering and technology. The course covers essential knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to describe various engineering disciplines, as well as admissions requirements for postsecondary engineering and engineering technology programs in Tennessee. They will also be able to identify simple and complex machines; calculate various ratios related to mechanisms; explain fundamental concepts related to energy; understand Ohm's Law; follow the steps in the engineering design process to complete a team project; and effectively communicate design solutions to others.

STEM Engineering Design II
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in STEM Engineering Design I

Upon successful completion of this course, students will take the Certified SolidWorks Associate Exam.
Industry Certification: Certified SolidWorks Associate

STEM Engineering II is an applied course in the STEM career cluster for students interested in further developing their skills as future engineers. This course covers the knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to explain the differences between scientists and engineers, understand the importance of ethical practices in engineering and technology, identify components of control systems, describe the differences between laws related to fluid power systems, explain why material and mechanical properties are important to design, create simple free body diagrams, use measurement devices employed in engineering, conduct basic engineering economic analysis, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others. Students in this course have the opportunity to take the SolidWorks (CSWA) certification exam. Students who pass the CSWA exam and maintain an overall course average of 85 will receive automatic dual credit with Pellissippi State Community College.

STEM Engineering Practicum
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in STEM Engineering Design II

STEM Practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous STEM Education courses within a professional working environment. In addition to developing an understanding of the professional and ethical issues encountered by STEM professionals in the workplace, students learn to refine their skills in problem solving, research, communication, data analysis, teamwork, and project management. Instruction may be delivered through school laboratory training or through work-based learning arrangements such as internships, cooperative education, service learning, mentoring, and job shadowing. Upon completion of this course, proficient students will be prepared for postsecondary study in a STEM field. Note: Course offering depends on availability. Students must complete the work-based learning application and meet attendance, grade, and discipline guidelines before being accepted in this course.

STEM Technology/DE Mechatronics Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Principles of Engineering and Technology	Digital Electronics	DE Mechatronics I and/or II	DE Mechatronics II
Notes: Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.			

STEM Principles of Engineering and Technology
Grade Level: 9-10 SEMESTER/ 1.000 credit(s)
Potential Industry Certifications Available: OSHA-10, NC3 Precision Measuring Instruments

Whether you want to build rockets, design robots, or create the next generation of smartphones, Principles of Engineering and Technology is the class for you. In this hands-on class, students learn important skills needed to have a successful career in the ever-changing world of engineering and technology. It all begins with the ability to identify, explain, and use the engineering design process. Students will explore current technologies as well as learn sketching and drawing techniques used in the design of new and existing technology. Students put these skills to use as they research, design, and build simple design projects and communicate these design solutions effectively with others.

Students who successfully complete BOTH the OSHA-10 and the NC3:PMI certifications are eligible to receive a free local dual credit through Pellissippi State Community College.

Digital Electronics
Grade Level: 10-12 FALL SEMESTER/ 1.000 credit(s)

Cell phones, laptop computers, high-definition televisions, and digital cameras. The world around you has been transformed by the advancements in electronic components and digital circuit design. At the heart of this revolution are digital electronics. In Digital Electronics, we will study the electronic circuits that are used to process and control digital signals. We will study basic circuits and electricity. Learning about circuits and control logic will be accomplished through challenging and rewarding hands-on team projects. Time will be spent equally in the classroom learning and designing and in the lab building, implementing, diagnosing circuits common to today's advanced electronics.

DE Mechatronics I: Industrial Mechanics
Grade Level: 11-12 FALL SEMESTER/ 1.000 credit(s)
Prerequisites: Principles of Engineering and Technology
Potential Industry Certifications Available: OSHA-10, NC3 Precision Measurement, NC3 Advanced Multimeter

Tired of lectures and taking notes. This hands-on class provides students with lots of opportunities to get out of their seats and actively engage in lab assignments and project-based work orders. From building and wiring a room to assembling and using a gantry crane, this class is always a student favorite. Get a jumpstart on a rewarding career designing, building and repairing the mechanical systems used in places like DENSO, Arconic, NASA, and every residential, commercial, and industrial job site around the world. Students successfully completing this course will acquire many beneficial skills regardless of their chosen profession. Knowledge and skills covered include:

- *Hand and Power Tools* - Everyone needs to know how to safely and correctly use a screwdriver and a hammer.
- *Fasteners* - Whether you're hanging a picture, building shelves, or assembling furniture, knowing which nail, screw, or bolt to use is important.
- *Rigging and Lifting* - Knowing how to tie a knot or balance a load is useful for everything from fishing to packing up and moving across the country.
- *Belts and Drives* - Knowing a thing or two about belts comes in handy when working on your riding mower or your car.
- *AND MUCH MORE!*

This is a dual enrollment course with Tennessee College of Applied Technology (TCAT). Students will use their dual enrollment grant or Pell grant funding to cover tuition costs. Students must maintain an 81 average and satisfactory attendance to remain in this course.

DE Mechatronics II: Electromechanics
Grade Level: 11-12 SPRING SEMESTER/ 1.000 credit(s)
Prerequisites: Mechatronics I: Industrial Mechanics
Potential Industrial Certifications: NC3 Snap-On Multimeters

Instead of staring at a PowerPoint on the board the entire class period, in this course, students get to grab a pair of strippers and a screwdriver, sit down in front of an electromechanical trainer and bring to life the circuits they have designed. Knowledge and skills covered include:

- *Control Logic Circuits* - From the switches that control the lights in a home to the integrated circuits of a computer, understanding control logic is essential.
- *AC and DC Motors* **-** Electric motors are found in the sophisticated Tesla Model 3 all the way down to the simple electric toothbrush.
- *Programmable Logic Controllers (PLCs)* - Computers are running everything these days. From smart homes to smart cars, programmable logic controllers are not just for the assembly line.
- *AND MUCH MORE!*

This is a dual enrollment course with Tennessee College of Applied Technology (TCAT). Students will use their dual enrollment grant or Pell grant funding to cover tuition costs. Students must maintain an 81 average and satisfactory attendance to remain in this course. Students will have an opportunity to complete the NC3 Snap-On Multimeter industry certification.

DE Mechatronics III: Fluid Power
Grade Level: 12 SPRING SEMESTER/ 1.000 credit(s)
Prerequisites: Mechatronics II: Electromechanics

Nearly all industrial processes require objects to be moved, manipulated, pushed or pulled. These movements require a force to be delivered from one place to another. This is frequently accomplished by means of fluids. This course covers the principles and applications involved in using liquid fluids (hydraulics) and gaseous fluids (pneumatics). Students will also continue mastering programmable logic controllers (PLCs) and ladder logic. This is a dual enrollment course with Tennessee College of Applied Technology (TCAT). Students will use their dual enrollment grant or Pell grant funding to cover tuition costs. Students must maintain an 81 average and satisfactory attendance to remain in this course.

DE Mechatronics IV: Advanced Robotics and Automation
Grade Level: 11-12 SPRING SEMESTER/ 1.000 credit(s)
Prerequisite: DE Mechatronics III

Potential Industry Certifications Available: OSHA-10, NC3 Precision Measurement, Fanuc Robot Certification, NC3 Advanced Multimeter

Mechatronics IV Dual Enrollment is a course provided by the Tennessee College of Applied Technology-Knoxville. This course allows students to apply the knowledge and skills gained in previous Mechatronics I-III dual enrollment classes to in-class projects and also offers potential work-based learning opportunities. Students will use their dual enrollment grant funding to cover tuition costs. Students must maintain an 81 average to remain in this course and maintain satisfactory attendance. Students completing OSHA-10 and Starrett Precision Measurement, with an overall 85 course average, can also receive local, dual credit with Pellissippi State Community College. Note: Course offering depends on availability.

Nursing Services (Pre-Licensed Practical Nursing-DE) Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Health Science Education	Medical Therapeutics	Anatomy & Physiology Or Medical Therapeutics	Nursing Education/Clinicals
Notes: Students must complete three courses of the same pathway to satisfy their elective focus area			

requirement for graduation.

Health Science Education
Grade Level: 9-11 SEMESTER/ 1.000 credit(s)
https://edulastic.com/

This course is an introduction to broad standards that serve as a foundation for healthcare occupations and functions across health services. The course will cover medical terminology, career planning, healthcare systems, body function and structure (basic anatomy/physiology), infection control, and foundational healthcare skills such as vital sign assessment, First Aid and CPR. HOSA membership and participation is encouraged. This course will serve as a strong foundation for all future health science courses.

Medical Therapeutics
Grade Level: 10-11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Health Science Education
Potential Industry Certifications: OSHA-10

Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. This course is required before a student can proceed to either of the medical certification courses (Nursing Education/C.N.A. or Emergency Medical Services/E.M.R.)

Human Anatomy & Physiology or Human Anatomy and Physiology Dual Enrollment
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Biology I
EPSO-Students accepted into the pre-LPN dual enrollment program with TCAT-Knoxville will receive credit hours toward the practical nursing licensure program upon successful completion of this course.

Anatomy and Physiology is designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems.

Nursing Education I and II or Nursing Education I and II Dual enrollment
Grade Level: 12 SEMESTER/ 2.000 credit(s)
Prerequisite: Health Science and Medical Therapeutics. Students must apply and be accepted to this course.
Upon successful completion of this course, students may sit for the Certified Nursing Assisting (CNA) Licensure Exam.
Industry Certification: C.N.A-Certified Nursing Assistant
EPSO-Students accepted into the pre-LPN dual enrollment program with TCAT-Knoxville will receive credit hours toward the practical nursing licensure program upon successful completion of this course.

Nursing Education is the senior level course in the Health Science cluster. This class is scheduled for two consecutive blocks in the Fall term and includes a Certified Nursing Assistant certification training program and a clinical internship component. Students will complete classroom training and participate in a clinical rotation with a long-term care facility during the first few weeks of the course. This portion of the class will prepare them to take the state C.N.A. licensure exam at the end of the course. The clinical internship component is the hands-on portion of the Nursing Education class. Students will be in a clinical setting (hospital, nursing home, physician office) once initial training is complete. Students will gain valuable clinical skills including: assessment of vital signs, certification in Healthcare Provider CPR, personal care, assisting with feeding, walking, assistive devices, and assessment skills. Students must also take Anatomy and Physiology prior to graduation to complete this path of study.

Emergency Services Course Sequence

Recommended Pathway			
9th Grade	10th Grade	11th Grade	12th Grade
Health Science Education	Anatomy & Physiology Or Medical Therapeutics	Anatomy & Physiology Or Medical Therapeutics	DE Emergency Medical Services Or EMS Practicum

Notes:
Students must complete three courses of the same pathway to satisfy their elective focus area requirement for graduation.

Health Science Education
Grade Level: 9-11 SEMESTER/ 1.000 credit(s)
Course Code: C14H14

This course is an introduction to broad standards that serve as a foundation for healthcare occupations and functions across health services. The course will cover medical terminology, career planning, healthcare systems, body function and structure (basic anatomy/physiology), infection control, and foundational healthcare skills such as vital sign assessment, First Aid and CPR. HOSA membership and participation is encouraged. This course will serve as a strong foundation for all future health science courses.

Medical Therapeutics
Grade Level: 10-11 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Health Science Education
Potential Industry Certifications: OSHA-10
Course Code: c14H15

Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. This course is required before a student can proceed to either of the medical certification courses (Nursing Education/C.N.A. or Emergency Medical Services/E.M.R.)

Human Anatomy & Physiology
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Biology I

Anatomy and Physiology is designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems.

DE Emergency Medical Services
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisite: One full credit in Medical Therapeutics. Students must be 17 years old before the course concludes.

Upon successful completion of this course, students may sit for the National Registry Exam Industry Certification: Emergency Medical Responder.

Emergency Medical Services is a capstone course designed to prepare students to pursue careers in the field of emergency medicine. Upon completion of this course, proficient students will be able to identify careers and features of the EMS system; define the importance of workforce safety and wellness; maintain legal and ethical guidelines; correlate anatomy and physiology concepts to the patient with a medical or traumatic injury; and perform EMS skills with a high level of proficiency. Students who successfully complete this course as dual enrollment taught by an EMT instructor will take the National Emergency Medical Responder Certification exam at the end of the course.

Work-Based Learning: Career Practicum
Grade Level: 11-12 SEMESTER/ 1.000 credit(s)
Prerequisites: This course is open to students age 16 or older who have completed at least two courses in his or her elective focus and who meet application/eligibility requirements.

Note: Students have the option to take this course for honors credit. Students will be accepted based on meeting eligibility requirements and teacher/work-based learning coordinator recommendation. Students can receive a credit in any work-based learning experience during both the Fall and Spring semesters.
Work-Based Learning: Career Practicum is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select internships, which allow students to interact with industry professionals in order to extend and deepen

classroom work and support the development of postsecondary and career readiness knowledge and skills.

Eligible students must be age 16 or older and must have completed two prior courses within their elective focus. Participating students must exhibit a 90% attendance rate. Students must be on track to graduate and demonstrate work-readiness attitudes and skills demonstrated through recommendations from their classroom instructors. Students participating in off-site internships must drive and have reliable transportation to and from the internship sites. Internships may be paid or unpaid experiences. Paid experiences should be obtained by the student prior to the course start date.
Workload: Students will be required to complete a personalized learning plan and digital portfolio to demonstrate knowledge and skills gained through their respective internships. Students will also participate in career-readiness skills such as developing resumes, completing job applications, and participating in mock interviews.

Work-Based Learning (WBL)

Senior and junior students interested in an internship have many options available to them through Work-Based Learning, including, but not limited to the options listed below. WBL has a separate application component and other rigorous requirements set forth by the state board of education that AHS must follow. WBL availability is subject to placement options and student requirements.

Work-Based Learning Off-Site

- Students will submit an application and if accepted will participate in an off-site internship related to his/her elective focus or career interest area. Examples of off-site internships might include: retail stores, engineering firms, hotels, restaurants, animal shelters, other businesses, or a student's existing paid job. Students must be able to drive in order to participate in an off-site internship.

Work-Based Learning Marsh Store

- Students will submit an application and if accepted will work in the Marsh School Store. Duties may include customer service, sales, drink preparation, stocking, and inventory. Students will report to Mrs. Gornto.

Work-Based Learning Teacher Assistant at AES, AIS, and AMS

- Students will submit an application and if accepted will serve as teacher interns at the Alcoa Elementary School, Intermediate School, or Middle School. Students will provide support to the classroom teacher in the delivery of student instruction and activities. Students may also choose to intern within the office, library, or school counselor's office. Students will report to their assigned teacher or staff member at AES, AIS, or AMS during their assigned block.

Physical Education

Lifetime Wellness Curriculum and Materials

Lifetime Wellness
Grade Level: 9 or 10 SEMESTER/ 1.000 credit(s)
Coure Code: G08H02

Lifetime Wellness is a holistic approach to health and lifetime physical activities in Tennessee high schools. This approach to total wellness encompasses the physical, mental, social, and emotional well-being of the individual. The content of the course includes Personal Fitness. This section is taught in the gymnasium, and/or a physical activity setting. Personal fitness and nutrition will be emphasized and integrated throughout the course. Students acquire knowledge and skills necessary to make decisions regarding their health and well-being throughout their lifetime. Students will be required to "dress out" in this course, and grading criteria includes class participation, effort, attitude, and the Presidential physical fitness test. This course qualifies for additional grade weighting for students who sit for the exam.

PE Fall/Spring
Grade Level: 9-12 SEMESTER/ 1.000 credit(s) per semester
Course Code: G08H00

This course will include units in individual and dual sports, team sports, fitness and conditioning, and rhythmic activities. Students are required to "dress out" in this course, and grading criteria includes class participation, effort, and attitude. This course may be taken for 1/2 or 1 credit. This course can be taken multiple times. Fall Semester: This section will cover most of the net sports: volleyball, ping-pong, pickleball, and badminton. Spring Semester: This section will cover several indoor sports: basketball, kickball, battle ball, and wiffle ball. Spring Semester: This section will cover several outdoor and indoor sports: softball, tennis, soccer, fishing, and walking. This class may be taken once per semester, if desired.

Men's Weight Training Fall/Spring
Grade Level: 9-12 SEMESTER/ 1.000 credit(s) per semester
Course Code: G08H01

Weight Training will consist of a variety of strength and power exercises that will enhance athletic performance while decreasing the chances for injury. The program will be based around the Squat, Bench Press, and various Olympic lifts. Students will lift heavy to develop absolute strength and light to develop dynamic power. Students will also perform lifts that will focus on strengthening the posterior-chain and shoulders to help athletes stay healthy and to maximize performance. A well designed strength program enhances the self-esteem and confidence level of students along with enhancing their physical well-being. This class may be taken once per semester, if desired.

Women's Weight Training Fall/Spring
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)
COurse Code: G08H01

The program will be designed to enhance health-related components of physical fitness for females, as well as the positive personal and social behaviors associated with exercise. Students will be expected to achieve and maintain a health-enhancing level of physical fitness in a safe, comfortable environment. Students will participate in a developmentally appropriate resistance-training program that will encompass components of muscular strength, muscular endurance, cardiovascular endurance, and flexibility. This is a cooperative learning environment that provides students the opportunity to accept diversity, become accountable for fitness, set and accomplish goals, and exhibit initiative. This class may be taken once per semester, if desired.

Early Bird Weight Training Fall/Spring
Grade Level: 9-12 SEMESTER/ 0.500 credit(s)

Course Code: G08H01

This class is offered before school from 7:15 am-8:15 am on Mondays, Wednesdays, and Thursdays. Students will earn a ½ credit, which will satisfy the state PE requirement. The program will be designed to enhance health-related components of physical fitness for females, as well as the positive personal and social behaviors associated with exercise. Students will be expected to achieve and maintain a health-enhancing level of physical fitness in a safe, comfortable environment. Students will participate in a developmentally appropriate resistance-training program that will encompass components of muscular strength, muscular endurance, cardiovascular endurance, and flexibility. This is a cooperative learning environment that provides students the opportunity to accept diversity, become accountable for fitness, set and accomplish goals, and exhibit initiative.

Additional Courses/ Electives

Education and Training

TAP I: Teaching as a Profession I (TAP I)

Grade level- 10-12 SEMESTER/1.000 credit(s)
Prerequisite: 2.75 GPA

An intermediate course for students interested in learning more about becoming a teacher, school counselor, trainer, librarian, or speech-language pathologist. This course covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, and educational technology. Students will conduct observations of educators at work and create artifacts for a course portfolio, which will continue with them throughout the program of study. Upon completion of this course, proficient students will have a fundamental understanding of instructional strategies needed for becoming an educator. This pathway culminates with an opportunity for the student to dual enroll at a local college to earn college credit.

Yearbook ACP Early Bird YEARLONG

Grade Level: 9-12 SEMESTER/ 1.000 credit(s) per semester
Prerequisite: Acceptance through staff application process ONLY
COURSE CODE: G01H15

Yearbook Advertising and Public Relations focuses on the concepts and strategies associated with promoting and designing a yearbook. This applied knowledge course addresses skills essential to the creative side of the yearbook industry and explores motivations for buying a yearbook. Students will demonstrate proficiency in fundamental advertising and public relations concepts by creating the Alcoa High School Yearbook as well as selling those yearbooks and business ads. Students learn basic photography, interviewing and writing skills, and how to design and edit yearbook pages using computer software. Throughout the school year, students will be given assignments and deadlines based on yearbook layout. You should be someone who is able to manage deadlines, work independently and be self-driven.

Workload is average, with some after school activities. Students will be asked to attend sporting events and other school sponsored activities for the purpose of taking photographs and will be admitted free of charge. Students also have the opportunity to earn a free yearbook for taking this course based on their

business ad sales total.

Note: This is a two semester commitment. Students will earn one credit per semester.

Driver's Education
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: Must be at least 15 years of age when taking Driver's Education.
Course Code: G08H03

Driver's Education is offered to students in 10th-12th grade who are at least fifteen years of age or will be fifteen during the semester in which they are enrolling in Driver's Education. Course emphasis will be on perfecting driving skills and techniques. Proper driving procedures, good driver attitude, and a respect for traffic laws, defensive driving, and safety will be emphasized. Instruction will include classroom activities and behind-the-wheel instruction. Older students will be placed in first term driving classes when possible. Assessment includes driving average, chapter test average, notebook grade, and final exam grade.

Online Learning
Curriculum and Materials Links:
Edgenuity.com
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)

Students may choose to take an online elective for one block during the school day. Students taking Online Learning will inform the teacher of their class choice once enrolled. Students may choose one of the following courses:

1) African American Studies:
2) Art History and Appreciation
3) Computer Applications and Technology
4) Social Issues

Academic Success
Grade Level: 9-12 SEMESTER/ 1.000 credit(s)

This comprehensive development classroom will meet the diverse and extensive needs of students. Instructional services are planned and implemented to support students' daily needs and meet their individualized educational goals. The instruction provided maximizes each student's learning potential across all areas of development, including communication, self-help, personal-social, academic, and pre-vocational/vocational domains. All students will receive the opportunity to learn and grow into independent adults.

Curriculum and Materials Links:
Action Magazine. https://action.scholastic.com/
Choices Magazine. https://choices.scholastic.com/
Overcoming Obstacles. https://www.overcomingobstacles.org/
Novels:
A Monster Calls by Patrick Ness
Be Not Far From Me by Mindy McGinnis
Harbor Me by Jacqueline Woodson

The Bridge Home by Padma Venkatraman
A Long Walk to Water by Linda Sue Park
Wonder by RJ Palacio
A Face for Picasso by Ariel Henley

Peer Buddy
Grade Level: 10-12 SEMESTER/ 1.000 credit(s)
Prerequisite: Application Required

This course is designed for students who desire to give academic and social support to fellow students in the Comprehensive Developmental Classroom. Students may earn multiple credits by working in the CDC classroom at Alcoa High School.

Early Dismissal Fall/Spring
Grade Level: 12 SEMESTER/ 0.000 credit(s)
Prerequisite: Must complete Early Dismissal Form & return to Student Affairs before class will be officially scheduled. Seniors must be in good standing to graduate.
Course Code: G25H10

Seniors may choose to leave school early for 4th block only if all other graduation and attendance requirements have been met and with written parental permission. Early Dismissal is a privilege and can be revoked at any point in the semester if academic and attendance requirements are not met. Students will not earn a credit for Early Dismissal because this request is not a class.

AAD Math and English
This course replaces or corresponds with English and Math Tennessee standards. The curriculum and instruction focus on a student's functional literacy- speaking, listening, reading, and writing skills with a modified curriculum and student's mathematical computation and reasoning skills with a modified curriculum. Students will engage with meaningful and appropriate instruction that encourages higher-order thinking and problem-solving skills to help them become self-determined and independent.

Life Skills
The objective of this class is to remove barriers that impact goal-setting and decision-making in learning environments and employment with learning and practicing skills. Students will learn coping strategies and become empowered to pursue educational/employment goals while improving general life skills.

Abbreviations Key

ACP = Advanced College Prep

- Honors-level high school courses offered in multiple subjects
- Students receive +3 additional percentage points to their final grade
- Students receive 0.5 additional bonus points to their weighted GPA

AP = Advanced Placement

- College-level high school courses offered in multiple subjects
- Nationally recognized exams
- Students receive +5 additional percentage points to their final grade
- Students receive 1.0 additional bonus points to their weighted GPA
- Students must sit for the culminating exam to receive additional bonus point weighting
- Opportunities for postsecondary credit determined by individual institutions

CP = College Prep

- High school courses offered in multiple subjects to prepare students for college
- No additional percentage points to final grades or bonus points to GPAs

DE = Dual Enrollment

- Postsecondary course taught at the postsecondary institution, high school, or online
- High school student is enrolled in the postsecondary institution
- Students receive +4 additional percentage points to their final grade IF the DE class is taken at Alcoa High School; classes taken outside of AHS do not receive additional percentage points
- Students receive 1.0 additional bonus points to their weighted GPA
- Postsecondary credit awarded upon course completion by the postsecondary institution; can be transferred to other postsecondary institutions

LDC = Local Dual Credit

- High school course aligned to standards at local/partner postsecondary institution
- Optional exam for credit at local institution
- Students receive +4 additional percentage points to their final grade
- Students receive 1.0 additional bonus points to their weighted GPA
- Students must sit for the culminating exam to receive bonus percentage points
- Students must enroll with the partner institution to receive direct postsecondary credit or notify registrar upon matriculation at another postsecondary institution to receive credit

SDC = Statewide Dual Credit

- High school course aligned to statewide postsecondary standards
- Required challenge exam for postsecondary credit at Tennessee institutions
- Students receive +4 additional percentage points to their final grade
- Students receive 1.0 additional bonus points to their weighted GPA
- All students are required to sit for the culminating exam
- Postsecondary credit accepted at all Tennessee public postsecondary institutions
- Students must notify registrar upon matriculation to receive credit